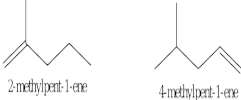
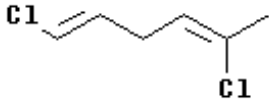


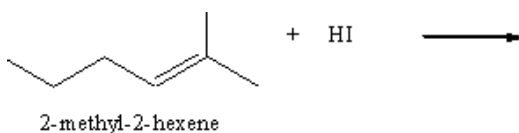
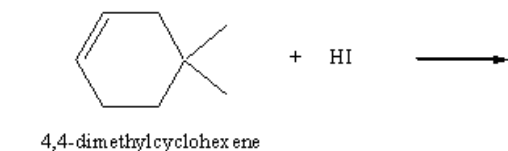
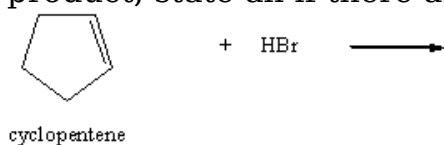
Assignment 3: Alkenes

1. Draw the structure or give the name of the structure of the below alkenes compounds according to the IUPAC, cis/trans or E/Z.

	 2-methylpent-1-ene 4-methylpent-1-ene
$\begin{array}{c} \text{HOCH}_2\text{CH}_2 \quad \text{CH}=\text{CH}_2 \\ \quad \quad \quad \diagdown \quad \diagup \\ \quad \quad \quad \text{C}=\text{C} \\ \quad \quad \quad \diagup \quad \diagdown \\ (\text{H}_3\text{C})_2\text{HC} \quad \text{Br} \end{array}$	$\begin{array}{c} \text{CH}_3 \quad \quad \text{CH}_3 \\ \quad \quad \\ \text{CH}_3-\text{CH}-\text{CH}=\text{C}-\text{CH}_3 \end{array}$
$\begin{array}{c} \text{CH}_3\text{CH}_2 \quad \quad \text{CH}_2\text{CH}_3 \\ \quad \quad \quad \diagdown \quad \diagup \\ \quad \quad \quad \text{C}=\text{C} \\ \quad \quad \quad \diagup \quad \diagdown \\ \text{H} \quad \quad \text{H} \end{array}$	 Cl Cl
1. (E)-3-isopropylhex-2-ene	
2. 2-ethyl-1-hexene	
3. Trans-2,4-dimethyl-3-hexene	
4. 2-methyl-cyclopentene	
5. 4-ethyl-3-propenyl-1,3-cyclohexadiene	
6. 1,2,3-trichloro-1-pentene	

2. The rule of Markovnikov states that:

3. Complete the following reactions and write the name for the product, state all if there are more than one product.



3. Draw the mechanism steps for the dehydration of the below compound. Specify & name the major and minor products.

